

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/23266

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D223/14 C07D403/06 A61K31/55 A61P3/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	VEJDELEK Z J ET AL: "Benzocycloheptenes and heterocyclic analogues as potential drugs. X. Derivatives of 2-Amino and 2-Hydroxy-6,7,8,9-tetrahydro-5H-benzocycloheptene" COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS, ACADEMIC PRESS, LONDON, GB, vol. 38, 1973, pages 2989-2995, XP009021925 ISSN: 0010-0765 Page 2990 relating to compounds IV and V	1-3
X	US 4 210 749 A (SHETTY BOLA V) 1 July 1980 (1980-07-01) examples 37,49,50,54; table 3 -/-	1,5

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

28 November 2003

Date of mailing of the international search report

10/12/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Hanisch, I

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 057 814 A (MEIJI SEIKA KAISHA) 6 December 2000 (2000-12-06) examples 13C, 19D	1, 6, 7
X	WO 98 46590 A (ISHIHARA YUJI ; FUJISAWA YUKIO (JP); FURUYAMA NAOKI (JP); TAKEDA CH) 22 October 1998 (1998-10-22) Starting material in Reference Examples 2 and 4 and Example 170.	1, 5, 6
P, X	WO 03 006466 A (MORRIS JEANETTE KAY ; ROMERO ARTHUR GLENN (US); FU JIAN-MIN (US); U) 23 January 2003 (2003-01-23) Scheme 1 (page 13), Preparation 1, step a (page 21)	1, 5
Y	EP 0 982 300 A (BIOPROJET SOC CIV) 1 March 2000 (2000-03-01) cited in the application in particular example 27 paragraph '0002! - paragraph '0003! paragraph '0017!; claims 1-7, 10, 16, 21, 23, 24, 26, 27, 76-81, 84-88; examples; tables	1-15
Y	WO 93 03015 A (SMITHKLINE BEECHAM CORP) 18 February 1993 (1993-02-18) page 11, line 3 - line 16; claims 1, 8	1-15
A	ODA T ET AL: "Molecular cloning and characterization of a novel type of histamine receptor preferentially expressed in leukocytes" JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 275, no. 47, 24 November 2000 (2000-11-24), pages 36781-36786, XP002164117 ISSN: 0021-9258 cited in the application abstract	1-15

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 1,4-7,9-15 (all partly not searched)
because they relate to subject matter not required to be searched by this Authority, namely:
see FURTHER INFORMATION sheet PCT/ISA/210
2. ☒ Claims Nos.: 1,4-7,9-15(all part)
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Although claims 10-15 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compounds/compositions.

Continuation of Box I.1

Claims Nos.: 1,4-7,9-15 (all partly not searched)

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy

Continuation of Box I.2

Claims Nos.: 1,4-7,9-15(all part)

The initial phase of the search revealed a very large number of documents relevant to the issue of novelty. So many documents were retrieved that it is impossible to determine which parts of the claim(s) may be said to define subject-matter for which protection might legitimately be sought (Article 6 PCT). For these reasons, a meaningful search over the whole breadth of the claim(s) is impossible. Consequently, the search has been restricted to those compounds of formula I in which one of R1 and R2 represents hydrogen and the other one "OR3NR4R5" according to claims 2,3 and 8, thereby encompassing all of the examples. Some arbitrary documents relating to compounds encompassed by formula I with R1=R2=hydrogen have been cited, too. However, it should be noted that the search report concerning the said group of compounds (R1=R2=hydrogen) is by no means complete.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4210749	A	01-07-1980	US 4233217 A	11-11-1980
EP 1057814	A	06-12-2000	JP 11189585 A	13-07-1999
			CA 2316388 A1	08-07-1999
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			EP 0975624 A1	02-02-2000
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			US 6534496 B1	18-03-2003
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			US 2003060458 A1	27-03-2003
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			AU 5511999 A	21-02-2000
			CA 2321881 A1	10-02-2000
			WO 0006254 A2	10-02-2000
			EP 1100503 A2	23-05-2001
			JP 2002521463 T	16-07-2002
WO 9303015	A	18-02-1993	AU 2433092 A	02-03-1993
			EP 0630372 A1	28-12-1994
			JP 6511239 T	15-12-1994
			WO 9303015 A1	18-02-1993
			US 5639748 A	17-06-1997